



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2015-5808; Directorate Identifier 2015-NM-111-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 787-8 airplanes. This proposed AD was prompted by reports of water leakage from the potable water system due to improperly installed waterline couplings, and water leaking into the electronics equipment (EE) bays from above the floor in the main cabin, resulting in water on the equipment in the EE bays. This proposed AD would require replacing the potable waterline couplings above the forward and aft EE bays with new, improved couplings. This proposed AD would also require sealing the main cabin floor areas above the aft EE bay, installing drip shields and foam blocks, and rerouting the wire bundles near the drip shields above the equipment in the aft EE bay. We are proposing this AD to prevent a water leak from an improperly installed potable water system coupling, or main cabin water source, which could cause the equipment in the EE bays to become wet, resulting in an electrical short and potential loss of system functions essential for safe flight.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-5808.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-5808; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Susan L. Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle

Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6457; fax: 425-917-6590; email: susan.l.monroe@faa.gov.

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2015-5808; Directorate Identifier 2015-NM-111-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

We received reports of water leakage from the potable water system due to improperly installed waterline couplings, and water leaking into the EE bays from above the floor in the main cabin, resulting in water on the equipment in the EE bays. Such leakage could result in an electrical short and potential loss of system functions essential for safe flight.

### **Related Service Information under 1 CFR part 51**

We reviewed the following service information:

- Boeing Alert Service Bulletin B787-81205-SB380009-00, Issue 001, dated March 26, 2015.

- Boeing Alert Service Bulletin B787-81205-SB530029-00, Issue 001, dated March 26, 2015.
- Boeing Alert Service Bulletin B787-81205-SB530031-00, Issue 001, dated March 26, 2015.

This service information describes procedures for replacing the potable waterline couplings above the forward and aft EE bays with new, improved couplings; sealing the floors, seat tracks, and lavatories above the aft EE bay; installing drip shields and foam blocks; and rerouting the wire bundles adjacent to the drip shields above the aft EE bay. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

#### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

#### **Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under "Difference Between this Proposed AD and the Service Information." Refer to this service information for details on the procedures and compliance times.

#### **Difference Between this Proposed AD and the Service Information**

Although Boeing Alert Service Bulletin B787-81205-SB530029-00, Issue 001, dated March 26, 2015; and Boeing Alert Service Bulletin B787-81205-SB530031-00, Issue 001, dated March 26, 2015, recommend accomplishing the sealing of the floors and seat tracks, installing drip shields, and rerouting adjacent wiring within 24 months; this proposed AD would require accomplishing those actions within 60 months. We have

determined that a 60-month compliance time for accomplishing these actions would address the unsafe condition in a timely manner.

This compliance time has been coordinated with Boeing.

### **Explanation of “RC” Steps in Service Information**

The FAA worked in conjunction with industry, under the Airworthiness Directive Implementation Aviation Rulemaking Committee (ARC), to enhance the AD system. One enhancement was a new process for annotating which steps in the service information are required for compliance with an AD. Differentiating these steps from other tasks in the service information is expected to improve an owner’s/operator’s understanding of crucial AD requirements and help provide consistent judgment in AD compliance. The steps identified as RC (required for compliance) in any service information identified previously have a direct effect on detecting, preventing, resolving, or eliminating an identified unsafe condition.

For service information that contains steps that are labeled as Required for Compliance (RC), the following provisions apply: (1) the steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD, and an alternative method of compliance (AMOC) is required for any deviations to RC steps, including substeps and identified figures; and (2) steps not labeled as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

### **Costs of Compliance**

We estimate that this proposed AD affects 17 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replace waterline couplings	Up to 24 work-hours X \$85 per hour = up to \$2,040	\$3,195	Up to \$5,235	Up to \$88,995
Seal floors and seat tracks	Up to 108 work-hours X \$85 per hour = up to \$9,180	\$137	Up to \$9,317	Up to \$158,389
Install drip shields and reroute wiring	Up to 42 work-hours X \$85 per hour = up to \$3,570	\$34,594	Up to \$38,164	Up to \$648,788

### Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States,

or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**The Boeing Company:** Docket No. FAA-2015-5808; Directorate Identifier 2015-NM-111-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to The Boeing Company Model 787-8 series airplanes, certificated in any category, as identified in the service information specified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD.

(1) Boeing Alert Service Bulletin B787-81205-SB380009-00, Issue 001, dated March 26, 2015.

(2) Boeing Alert Service Bulletin B787-81205-SB530029-00, Issue 001, dated March 26, 2015.

(3) Boeing Alert Service Bulletin B787-81205-SB530031-00, Issue 001, dated March 26, 2015.

**(d) Subject**

Air Transport Association (ATA) of America Code 38, Water/Waste; and Code 53, Fuselage.

**(e) Unsafe Condition**

This proposed AD was prompted by reports of water leakage from the potable water system due to improperly installed waterline couplings, and water leaking into the electronics equipment (EE) bays from above the floor in the main cabin, resulting in water on the equipment in the EE bays. We are issuing this AD to prevent a water leak from an improperly installed potable water system coupling, or main cabin water source, which could cause the equipment in the EE bays to become wet, resulting in an electrical short and potential loss of system functions essential for safe flight.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Replace Potable Waterline Couplings**

Within 24 months after the effective date of this AD: Replace the existing potable waterline couplings located above the forward and aft EE bays with new, improved couplings, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB380009-00, Issue 001, dated March 26, 2015. Before further flight after doing the replacement, do a potable water system leak test and repair any leaks found before further flight, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB380009-00, Issue 001, dated March 26, 2015.

**(h) Seal Floor Panels and Seat Tracks/Install Drip Shields and Reroute Wiring**

Within 60 months after the effective date of this AD: Do the actions specified in paragraphs (h)(1) and (h)(2) of this AD.

(1) Apply sealant to the main cabin floor areas located above the aft EE bay, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB530029-00, Issue 001, dated March 26, 2015.

(2) Install drip shields and foam blocks, and reroute the wire bundles above the equipment in the aft EE bay, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB530031-00, Issue 001, dated March 26, 2015.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (j)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, alteration, or modification required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO to make those findings. For a repair method to be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (i)(4)(i) and (i)(4)(ii) apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

**(j) Related Information**

(1) For more information about this AD, contact Susan L. Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6457; fax: 425-917-6590; email: susan.l.monroe@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on November 9, 2015.

Michael Kaszycki,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2015-29441 Filed: 11/18/2015 8:45 am; Publication Date: 11/19/2015]